## **Frequently Asked Questions**

#### Why do I get this report each year?

Community water system operators are required by federal law to provide their customers with an annual water quality report. The report helps people make informed choices about the water they drink. It lets people know what contaminants are in their drinking water and how these contaminants may affect their health. It also gives the system operators a chance to tell customers what it takes to deliver safe drinking water.

#### Why does my water sometimes look "milky"?

The "milky" look is caused by tiny air bubbles in the water. The water in the pipes is under pressure, and gases (the air) are dissolved and trapped in the pressurized water as it flows into your glass. As the air bubbles rise in the glass, they break free at the surface, thus clearing up the water. Although the milky appearance might be disconcerting, the air bubbles won't affect the quality or taste of the water.

#### How can I keep my pet's water bowl germ free?

Veterinarians generally recommend that water bowls be washed daily with warm, soapy water—normally when you change the water. Scour the corners, nooks, and crannies of the water dish using a small scrub brush. In addition, once a week put water bowls into the dishwasher to sanitize them with hot water. In most situations, disinfectants like bleach are not needed; warm, soapy water is all you need to keep your pet's water clean and safe.

# Is it okay to use hot water from the tap for cooking and drinking?

No, always use cold water. Hot water is more likely to contain rust, copper, and lead from household plumbing and water heaters. These substances can dissolve into hot water faster than they do into cold water, especially when the faucet has not been used for an extended period of time.

# How many contaminants are regulated in drinking water?

The U.S. EPA regulates over 80 contaminants in drinking water. Some states may choose to regulate additional contaminants or to set stricter standards, but all states must have standards at least as stringent as the U.S. EPA's. The complete list can be viewed at http://water.epa.gov/drink/contaminants/index.cfm.

# Should I be concerned about sodium in my drinking water?

The USDA recommended daily allowance for sodium for a healthy adult is 2400 mg per day. Two quarts (about 8 servings) of our tap water per day has 51 mg or about 2% of the RDA. The leading sources of sodium in a typical diet are bread like foods.

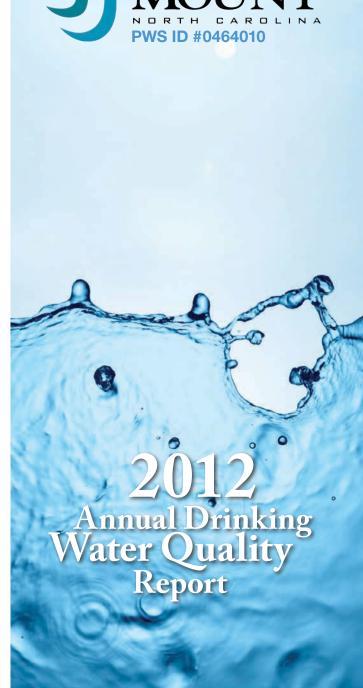




Water Resources Staff demonstrated mastery of water and sewer knowledge. Leaders of the divisions of Rocky Mount Water Resources teamed up to best the brain trusts of other municipalities of North Carolina in the NC AWWA Process Control Challenge, a timed competitive examination of hydraulics and process control.

# For more information about your water

For more information about this report, or for any questions relating to your drinking water, please call Jim Connolly, Water Treatment Superintendent, at (252) 972-1336.



#### **Our Drinking Water Is Regulated**

The City of Rocky Mount is pleased to share this report with you. This report is a summary of the quality of the water we provide our customers. The analysis covers January 1 through December 31, 2012, and was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

### **Source of Drinking Water**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff,

and septic systems.

 Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

#### Where Do We Get Our Drinking Water?

The source of our water is the Tar River. We treat the water at either of two water treatment facilities before it is introduced into the water distribution system. One facility is located at the Tar River Reservoir, and the other is located on Sunset Avenue across from City Lake. In 2012, we treated and distributed 3,320 million gallons of water to customers in the City of Rocky Mount and surrounding communities. To learn more about our watershed on the Internet, go to U.S. EPA Surf Your Watershed Web page at www.epa.gov/surf.

#### **Source Water Assessment**

The North Carolina Department of Environment and Natural Resources (DENR) conducts a Source Water Assessment Program. The purpose of our assessment was to determine the susceptibility of the drinking water source to potential contamination. The assessment reported a susceptibility rating of higher for the Sunset Avenue treatment facility on the Tar River and a rating of moderate for the Tar River Reservoir treatment facility. These ratings do not imply poor water quality; rather, they signify the system's potential to become contaminated. The complete SWAP (Source Water Assessment Program) report for North Carolina water suppliers may be viewed at http://swap.deh.enr.state.nc.us/swap. If you have any questions about the assessment, please contact the Source Water Assessment staff at (919) 715-2633.

# **All Drinking Water May Contain Contaminants**

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

## **Lead and Drinking Water**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Rocky Mount is responsible for providing high quality drinking water, but cannot control the variety of materials used in customer plumbing components. When your water has been sitting in the home piping for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.



## 2012 Test Results

We routinely monitor for constituents in your drinking water according to Federal and State laws. The test results table shows the results of our monitoring for the period of January 1st to December 31st, 2012. In the table you might find terms and abbreviations you are not familiar with. To help you better understand these terms we've provided the following definitions:

#### **Definitions**

- Action Level (AL) the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Action Level Goal (ALG) the level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
- Avg. Regulatory compliance with some MCLs is based on running annual average of monthly samples.
- Maximum Contaminant Level (MCL) the highest level of a contaminant that is allowed in drinking water.
   MCLs are set as close to the MCLGs as feasible using the best available treatment technology. Secondary MCLs are unenforceable guidelines for aesthetic quality of water.

- Maximum Contaminant Level Goal (MCLG)
  the level of a contaminant in drinking water
- below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- Maximum Residual Disinfectant Level (MRDL) the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Maximum Residual Disinfectant Level Goal (MRDLG) the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

- **mrem** millirems per year (a measure of radiation absorbed by the body).
- NA not applicable.
- N-no
- ND not detected.
- TT treatment technique
- NTU Nephelometric Turbidity Units.
- Parts per billion (ppb) micrograms per liter (μg/L) or one ounce in 7,800,000 gallons of water.
- Parts per million (ppm) milligrams per liter (mg/L) or one ounce in 7,800 gallons of water.
- SU standard unit

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Microbiological Contaminants					
Contaminant	MCL Violation	Your Water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	0.3%	0	5% of monthly samples are positive	Naturally present in the environment
Fecal Coliform or E. Coli	N	0	0	N/A	Human and animal fecal waste

Turbidity					
Contaminant	Violation Y/N	Level Detected	Average	MCL (Allowable Level)	Major Sources in Drinking Water
NTU	N	0.04-0.29	0.13	TT=1 NTU	Soil runoff
NTU % samples <0.3	N	100%	N/A	N/A	

Turbidity is a measurement of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

Inorganic Cont	aminants					
Contaminant (Units)	Violation Y/N	Average	Range	MCLG	MCL	Major Sources in Drinking Water
Fluoride (ppm)	N	0.71	0.26-1.53	4	4	Erosion of natural deposits; water additive which promotes strong teeth

Unregulated Inorganic Contaminants									
Contaminant (Units)	Violation Y/N	Sample Date	Your water	Range	Secondary MCL				
Sulfate (mg/L)	N	4/12/12, 6/26/12	57.6	45.6-69.5	250				

Unregulated VOC Co	Unregulated VOC Contaminants										
Contaminant (Units)	Violation Y/N	Sample Date	Your water	Range	Likely Source of Contamination						
Chloroform (ppb)	N	JanNov. 2012	48	20-152	By-products of drinking water disinfection						
Bromodichloromethane (ppb)	N	JanNov. 2012	12	8-25.5	By-products of drinking water disinfection						
Chlorodibromomethane (ppb)	N	JanNov. 2012	2	ND-5	By-products of drinking water disinfection						

Lead and Copper							
Contaminant (Units)	Violation Y/N	Date Sampled	Your Water	# of sites above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) at 90th percentile	N	AugSept. 2011	0.061	0	1.3	AL= 1.3ppm	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead (ppb) at 90th percentile	N	AugSept. 2011	<3	1	0	AL= 15ppb	Corrosion of household plumbing systems; erosion of natural deposits

Total (	Organic (	Carbon (	(TOC)
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Contaminant	TT Violation Y/N	Your Water RAA Removal Ratio	Range of Monthly Removal Ratios	MCLG	MCL	Compliance Method	Likely Source of Contamination	
Total Organic Carbon	N	1.5	1.38-1.61	N/A	TT	Step 1	Naturally present in the environment	

Depending on the TOC in our source water, the system must have a certain percent removal of TOC or must achieve alternative compliance criteria. If we do not achieve that percent removal, there is an alternative percent removal. If we fail to meet the alternative percent removal, we are in violation of a Treatment Technique.

### Disinfectants and Disinfection By-products

Contaminant (Units)	Violation Y/N	Average	Range	MCLG	MCL	Likely Source of Contamination
Total Trihalomethanes (TTHM) (ppb)	N	60	30-182	N/A	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	N	37	15-79	N/A	60	By-product of drinking water chlorination
Chloramines (ppm)	N	3	0.1-4.5	4	4	Water additive used to control microbes
Chlorine (ppm)	N	2.9	1.3-3.8	4	4	Water additive used to control microbes

## **Secondary Contaminants**

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Contaminant (Units)	Sample Date	Average	Range	Secondary MCL	Noticeable Effects Above the Secondary MCL
Iron (mg/L)	4/12/12, 6/26/12	0.037	ND-0.073	0.3	Rusty color; sediment; metallic taste; reddish or orange staining
Manganese (mg/L)	4/12/12, 6/26/12	0.006	ND-0.011	0.05	Black to brown color; black staining; bitter metallic taste
pH (SU)	N/A	N/A	6.8-8.8	6.5-8.5	low pH: bitter metallic taste; corrosion/high pH: slippery feel; soda taste; deposits

Secondary Drinking Water Regulations are non-enforceable guidelines regarding contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Water Characteristics								
Contaminant (Units)	Sample Date	Average	Range	Likely Source of Contamination				
Sodium (ppm)	4/12/12, 6/26/12	24.8	21.5-27	Sodium refers to the salt present in the water and is generally naturally occurring.				
Hardness (mg/L)	N/A	47	28-68	Hardness is the sum of polyvalent cations present in the water, generally				











